

AMENDMENT UNDER 37 C.F.R. § 1.116

U.S. Application No.: 10/509,855

Attorney Docket No.: Q69582

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A metal-coated abrasive comprising a bonding metal ~~composed~~ comprised of nickel-phosphorous and plural abrasive grains bonded by the bonding metal, wherein surfaces of individual abrasive grains are directly coated with a metal layer, consisting of cobalt-phosphorous.

2 to 7. (canceled). The metal-coated abrasive according to claim 1, wherein surfaces of the abrasive grains are directly coated with a metal layer.

8. (currently amended): The metal-coated abrasive according to claim 12, wherein the metal layer, with which the abrasive grains are coated, is formed of a single layer of cobalt-phosphorus ~~nickel or nickel-phosphorus~~.

9. (canceled).

10. (currently amended): The metal-coated abrasive according to claim 19, wherein the bonding metal, by which the abrasive grains are bonded, further contains ~~is nickel or nickel-phosphorus~~.

11. (currently amended): The metal-coated abrasive according to claim 1, wherein the individual abrasive grains have an average grain size of 0.5 to 300 μm .

12. (currently amended): The metal-coated abrasive according to claim 11, wherein the individual abrasive grains have an average grain size of 1 to 150 μm .

13. (previously presented): The metal-coated abrasive according to claim 1, wherein the abrasive grains comprise at least one selected from the group consisting of cubic boron nitride, diamond, alumina and silicon carbide.

14. (original): The metal-coated abrasive according to claim 13, wherein the abrasive grains comprise one of cubic boron nitride, diamond, and a mixture thereof.

15. (previously presented): The metal-coated abrasive according to claim 1, wherein an average of 2 to 100 abrasive grains is bonded by the bonding metal.

16. (previously presented): The metal-coated abrasive according to claim 15, wherein an average of 2 to 50 abrasive grains is bonded by the bonding metal.

17. (currently amended): A grinding wheel ~~using~~ comprised of a metal-coated abrasive containing 5% by weight or more of the metal-coated abrasive of claim 1.

18. (original): The grinding wheel according to claim 17, which is a resinoid grinding wheel.

19. (currently amended): Coated abrasives ~~using~~ containing the metal-coated abrasive of claim 1.

AMENDMENT UNDER 37 C.F.R. § 1.116
U.S. Application No.: 10/509,855
Attorney Docket No.: Q69582

20. (currently amended): A method of producing the metal-coated abrasive of claim 21, which comprises forming ~~a~~the coating metal layer, with which abrasive grains are coated, ~~using~~by an electroplating or electroless plating method.

21. (currently amended): A method of producing the metal-coated abrasive of claim 1, which comprises bonding plural abrasive grains by ~~a~~the bonding metal ~~by~~using an electroplating or electroless plating method.

22. (currently amended): A method of producing the metal-coated abrasive of claim 12, which comprises dipping abrasive grains in an electroplating or electroless plating bath to form ~~a~~the coating metal layer on the surface of the abrasive grains while stirring, and thereafter bonding with the bonding metal the abrasive grains coated with the metal layer while gently stirring.